

## **GROUNDWATER**

The involvement of the groundwater research group in the Department of Earth Sciences is relatively new. The group primarily focuses on improving the fundamental understanding of how Earth's interconnected water system works in different parts of the world and evaluates the processes and the variability that characterizes and governs the fluxes, availability, and quality of water and how they are affected by society and climate. The team has assessed how improved scientific understanding can augment the management of critical water resources and alleviate water-related risks of drought, freshwater pollution, and land subsidence. The research utilizes both remote sensing and model-based approaches to study and decipher different water aspects and associated natural hazards and included analysis of hydrologic states and fluxes over a range of space and time scales, drought monitoring, investigations on the quality and stores of groundwater, remote sensing of glacier mass budget, and monitoring of coal mine fire.